

## ABSTRACT OF THE DISCLOSURE

A cross polarization interference canceller includes (a) first and second signal receivers which receive signals having been transmitted through first and second polarizations vertical with each other, (b) first and second local oscillators each of which converts one of the signals into an IF signal, (c) first and second demodulators each of which demodulates the IF signal for producing a base-band signal and a cross polarization interference cancel reference signal, (d) a phase-difference detector which detects a phase-difference between local signals transmitted from the first and second local oscillators, and transmits a phase-difference signal indicative of the thus detected phase-difference, and (e) first and second phase controllers associated with the first and second demodulators, respectively, and each equalizing phases of the base-band signal and the cross polarization interference cancel reference signal to each other in accordance with the phase-difference signal.